

Brown Marmorated Stink Bug Becomes Established in Stanislaus County Orchards

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Brown marmorated stink bug (BMSB) is an invasive insect pest of several crops and ornamental plants. In addition to being an agricultural pest, BMSB can be a serious nuisance problem for residential areas when BMSB adults migrate en masse to warm places (houses, buildings, barns) during the winter. BMSB caused significant economic loss for the tree fruit industry in the Mid-Atlantic region in 2010 after it became established in Pennsylvania. Since then BMSB has spread rapidly to at least 43 states. In 2013, a large population of BMSB was detected in downtown Sacramento. This was the first detection of BMSB in California. Since then, it has spread to neighboring cities and counties. In Stanislaus County, the first reproducing population of BMSB was detected near Freeway 99 in Modesto during the summer of 2015. Since then, residents from Modesto, Ceres, Empire, Salida and Turlock have reported BMSB in their houses, backyard trees, and nearby parks. In 2016, several BMSB adults were detected in a peach orchard in the Empire area. This was the first documented case of BMSB established in an agricultural area in the state of California. Peach is one of the favorite hosts of BMSB. Reproducing populations have now been documented feeding in area almond orchards as well.

To understand the extent of spread and seasonal phenology in Stanislaus County orchards, UC Cooperative Extension expanded their monitoring effort in local orchards, particularly in areas where growers and residents reported BMSB activity. BMSB adults have now been captured in several orchard sites. The risk of economic loss to tree fruits and nut crops by BMSB is yet to be determined. Because crops like almonds and walnuts are not grown outside of California, we do not know if they will be preferred hosts of the insect or if BMSB will become a significant management problem.

At this point, we recommend that growers and pest control advisers (PCAs) scout their orchards for potential BMSB infestation. UC Cooperative Extension is continuing research into the best trap methods and management strategies for commercial orchards and delivering that information to local growers and their pest management professionals. More research regarding the control options for BMSB in California is needed.



Figure 1 Black pyramid trap used in BMSB monitoring.
Photos by J. Rijal

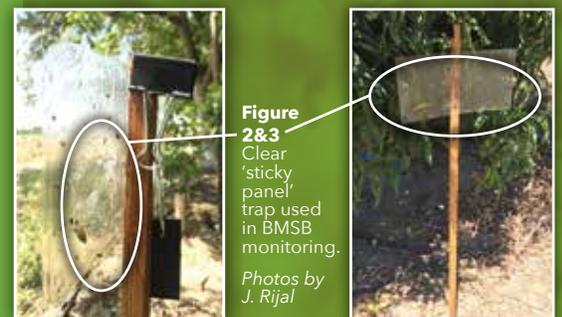


Figure 2&3 Clear 'sticky panel' trap used in BMSB monitoring.
Photos by J. Rijal